XVIII. "Magnetic Observations at Zi-Ka-Wei." By M. Dechevrens, Director of the Observatory. Communicated by the Rev. S. J. Perry, F.R.S. Received June 15, 1874.

Stonyhurst Observatory,
June 13th, 1874.

My dear Sir,—I enclose a report of some magnetic observations made at the New Observatory of Zi-Ka-Wei with instruments which I sent from England some time since. A complete set of self-recording magnetographs have just been completed for the same observatory by Mr. Adie, and will be forwarded to their destination this week. The Director of the Observatory of Zi-Ka-Wei, as well as his first assistant, have both received full instructions in the use of these instruments, so we may reasonably hope that the science of terrestrial magnetism will be much advanced by the foundation of this new establishment.

Yours sincerely,

S. J. Perry.

G. G. Stokes, Esq., Sec.R.S.

Premiers résultats concernant la Variation diurne de la Déclinaison à Zi-Ka-Wei (Chine).

Observations faites le 23–24 et le 29 Mars, 1874, le 6 et le 12 Avril, 1874.

Dates.	Point de départ.		Minimum.		Maximum.		Point d'arrêt.		Moyenne de la déclinaison.	Amplitude maxim. de l'excursion.	
	heure.	Déclin.	heure.	Déclin.	heure.	Déclin.	heure.	Déclin.			
	matin.	° ′ ″	matin.	° ′ ″	soir.	° ′ ″	soir.	° ′ ″	° ′ ″	m. s.	′ ″
Mars 23	6.30	1 55 33·8	10	1 51 4·79	2	1 58 40·19	5.30	1 54 31·79	1 54 41·29	10–2	7 35·4
„ 29	6	1 56 4·19	10	1 47 19·79	2	1 55 22·79	6	1 50 46·79	1 52 23·3	m. 6–10	8 44·4
										s. 10–2	8 3
Avril 6	6	1 51 33·5	9	1 49 19·3	2	1 58 20·6	5·49	1 54 32·9	1 53 23·12	9–2	9 1·3
„ 12	5.45	1 52 27·9	8.40	1 48 46·1	2	1 54 4	5·49	1 50 51·3	1 51 32·42	8.40–2	5 17·9

[The above Table is accompanied by a figure with the results projected, and is followed by a magnetic bulletin for March 1874, from which the following mean results are extracted :—

Declination	1° 53′ 59″·8 W.
Vertical intensity	7·22996
Inclination	46° 13′ 13″·7
Horizontal intensity	6·92833
Total intensity	10·0137

G. G. S.]